

CAM on PubMed

http://PubMed.gov





National Network of Libraries of Medicine, South Central Region Houston Academy of Medicine-Texas Medical Center Library 1133 John Freeman Blvd. Houston, TX 77030

NLM Contract No.: N01-LM-1-3515

SCOPE OF PUBMED

Entrez System

 A search and retrieval system that integrates information from databases at the National Center for Biotechnology Information (NCBI) including PubMed, the Journals Database and the MeSH Browser

Coverage

- Approximately 15 Million records
- 1950-Present
- Close to 4600 current journals in English and 70 foreign languages are indexed
- Medicine, nursing, dentistry, veterinary medicine, health care system, preclinical sciences
- Includes MEDLINE, OLDMEDLINE, In Process Citations, and Publisher-Supplied Citations

MEDLINE

- NLM's premiere database of biomedical journal citations
- Coverage 1966-present
- Citations are listed in PubMed with a [PubMed indexed for MEDLINE] notation

□ 6.	Steni	henson	Ī
L O:	ore bi	110112011	и.

Monkeypox outbreak a reminder of emerging infections vulnerabilities. JAMA. 2003 Jul 2;290(1):23-4. No abstract available. PMID: 12837700 [PubMed - indexed for MEDLINE]

OLDMEDLINE

- Current coverage 1950-1965.
- NLM expects to continue converting older citations and adding them to PubMed
- Have no abstracts
- Citations are listed with a [PubMed OLDMEDLINE for Pre1966] notation

1: MCCONNELL SJ, SPERTZEL RO, HUXSOLL DL, ELLIOTT LH, YAGER RH.

PLAQUE MORPHOLOGY OF MONKEYPOX VIRUS AS AN AID TO STRAIN IDENTIFICATION.

J Bacteriol. 1964 Jan;87:238-9. No abstract available.

PMID: 14105195 [PubMed - OLDMEDLINE for Pre1966]

In Process Citations

- Provides basic citation information and abstracts before the full records are prepared and added to MEDLINE
- Citations are listed with a [PubMed in process] notation

□ 3: Maskalyk J.



Monkeypox outbreak among pet owners. CMAJ. 2003 Jul 8;169(1):44-5. No abstract available.

PMID: 12847040 [PubMed - in process]

Publisher-Supplied citations

- Publishers can send citations electronically to PubMed
- Citations are listed with a [PubMed as supplied by publisher] notation

☐ 1: [No authors listed]



Update: Multistate Outbreak of Monkeypox--Illinois, Indiana, Kansas, Missouri, Ohio, and Wisconsin, 2003. JAMA. 2003 Jul 16;290(3):325-327. No abstract available.

PMID: 12865364 [PubMed - as supplied by publisher]

SEARCHING PUBMED



Performing a Simple Search

• Enter search terms in the query box and click on the Go button

Automatic Term Mapping

- In a simple search, terms are simply typed in the search bar with no tags. In PubMed, terms without tags are matched against lists and tables in this order:
 - o MeSH (Medical Subject Headings) Translation Table
 - Journals Translation Table
 - Author Index (Author name format: last name first initial second initial, i.e. Smith JC)

Phrase Searching

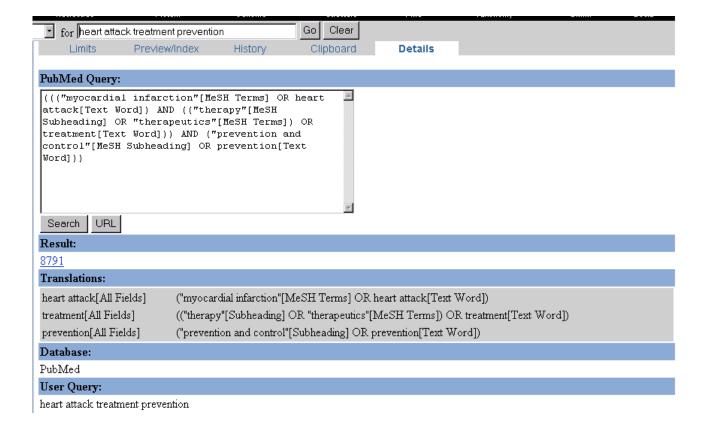
- The PubMed system searches for a phrase when:
 - 1) The search tag [tw] is entered after the phrase
 - 2) The phrase is in quotation marks
 - 3) It is an hyphenated phrase
 - 4) The phrase is truncated

Truncation

- Truncation allows you to find all terms that begin with a given text string
- Place an asterisk (*) at the end of a term to search for all terms that begin with that term
- The asterisk can only be used at the end of a term
- Truncating a term will override the PubMed automatic mapping feature

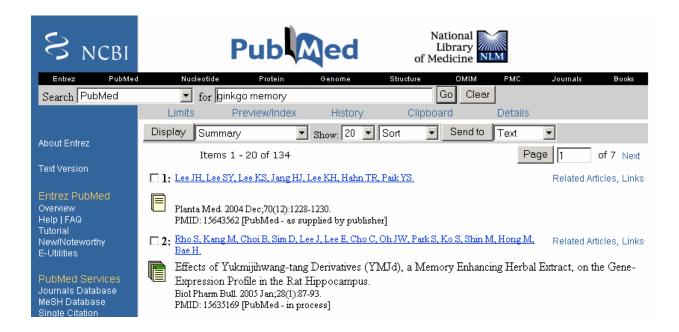
Details

- *Details* allows you to view your search strategy as it was translated using PubMed's automatic term mapping and search rules and syntax
- Click on *Details* to view the *PubMed Query* box and the *Translations* section
- The terms in brackets detail how the search was interpreted
- [MeSH Terms] means the search term was mapped to a MeSH heading
- [Text Word] means the search term was found to be a known term or phrase in the database
- Any search term with [All Fields] after it in the PubMed Query box means the term was not known in the database and the term was searched as a keyword in every field



- The *PubMed Query* box allows you to edit a search strategy and run another search by clicking on the *Search* button
- The *URL* button allows you to save a search strategy as an HTML file
- Clicking on the number of results returns you to the Search Result Screen

SEARCH RESULTS SCREEN



Query Box

- On the results screen, the query box is always active
- The *Clear* button will allow you to delete the contents of the query box so you can start a new search

Display Formats

- The default display is the *Summary* format
- Clicking on the author names takes you to the *Abstract* display of the citation
- Notice that some citations include links to Comments or Corrections:

Comment in:

Br J Cancer. 2004 Jan 26;90(2):408-13.

Related Articles, Links

Comment in:

Br J Cancer. 2004 Aug 31;91(5):995-6; author reply 996-7.

BJC British Journal of Cancer

Potential health risks of complementary alternative medicines in cancer patients.

Werneke U, Earl J, Seydel C, Horn O, Crichton P, Fannon D.

Homerton Hospital, East Wing, Department of Psychiatry, Homerton Row, London E9 6SR, UK.

Ursula. werneke@elcmht.nhs.uk

Many cancer patients use complementary alternative medicines (CAMs) but may not be aware of the potential risks. There are no studies quantifying such risks, but there is some evidence of patient risk from case reports in the

literature. A cross-sectional survey of patients attending the outpatient department at a specialist cancer centre was

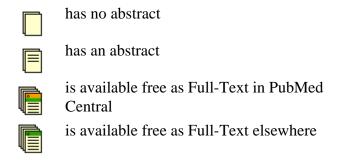
- To change the display format click on the *Display* dropdown box
- Choose a format
- Click on the *Display* button to display results in the new format

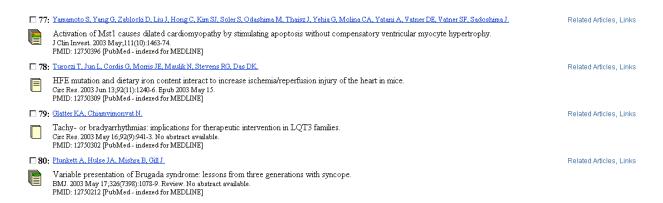


Summary format: Complete citation including author(s), title of article, journal source, and PubMed Unique Identifier (PMID)

Abstract format: Everything in the Summary plus the abstract of the article Citation format: Everything in the Abstract plus the MeSH headings for the article MEDLINE format: This gives the two-character tagged fields for all fields of the MEDLINE record. Note: Use the MEDLINE format for importing PubMed citations into bibliographic management databases (i.e. EndNote, Reference Manager, Pro Cite)

• The icons next to the citations in the *Summary* format indicates whether the citation:





Sort

- Citations are displayed in order of most recently indexed citations first: last in, first out
- Sort allows you to re-sort your results by Author, Journal or Publication Date
- To re-sort the citations, select a sort field (Author, Journal, Pub Date) from the *Sort* dropdown box and click on the *Display* button

Show

- Show allows you to change the number of results displayed per page
- Click on the Show dropdown box to change the number of documents per page
- Click on the *Display* button to redisplay the results

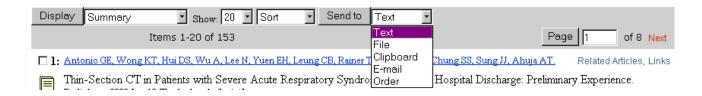


- *Items* denotes the total number of citations found and which numbers you are currently viewing
- Page denotes the total number of pages of results and which page you are currently viewing
- *Previous* and *Next* allows you to move from one page to another
- To jump to another page, type the page number in the page box and click on the *Page* button



Send to

• The Send to button provides you various ways handle the search results: Text, File, Clipboard, E-mail and Order



Send to: Text

- *Text* allows you to redisplay citations using just the text of the record and omitting the Web or HTML components
- Select *Text* in the dropdown box and click on the *Send to* button
- Use your Web browser's Back button to return to your results in HTML
- The text version will display either selected citations, or if no citations are selected, all the citations on a single page

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1: Hoffman JR, Donato A, Robbins SJ.

Ginkgo biloba promotes short-term retention of spatial memory in rats.

Pharmacol Biochem Behav. 2004 Mar;77(3):533-9.

PMID: 15006464 [PubMed - indexed for MEDLINE]

2: Persson J, Bringlov E, Nilsson LG, Nyberg L.

The memory-enhancing effects of Ginseng and Ginkgo biloba in healthy volunteers.

Psychopharmacology (Berl). 2004 Apr;172(4):430-4. Epub 2003 Nov 25.

PMID: 14647971 [PubMed - indexed for MEDLINE]

3: Hoyer S.

Memory function and brain glucose metabolism.

Pharmacopsychiatry. 2003 Jun;36 Suppl 1:S62-7. Review.

PMID: 13130391 [PubMed - indexed for MEDLINE]
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Printing

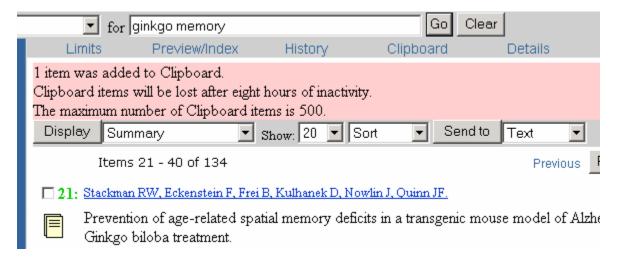
- Use the Print function of your Web browser to print a page at a time
- HINT: Use *Show* to increase the number of citation displayed on a page
- To eliminate graphics, etc., consider using the Text option described above

Send to: File

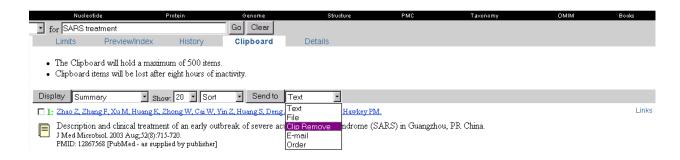
- *File* allows you to save your search results
- Select *File* in the dropdown box and click on the *Send to* button
- Though only the first batch of citations are displayed (i.e. 1-20), this option allows you to save up to 10,000 citations
- To save selected citations, click in the check box next to individual citations, and then choose the *File* option
- The saved results can be viewed in any word processor

Send to: Clipboard

- *Clipboard* allows you to save or view selected citations from one search or several searches that you may want to print, save, email or order
- To place an item on the *Clipboard*, first click on the check box to the left of the citation, then select *Clipboard* in the dropdown box and click on the *Send to* button



- You will receive a message in a pink box stating the number of citations added to the Clipboard
- Notice the citation numbers of the citations added to *Clipboard* are now green
- Adding citations from multiple searches into *Clipboard* allows you to remove duplicates
- Click on the *Clipboard* option on the *Features* bar to view the citations in *Clipboard*
- To remove any citations from the *Clipboard*, click in the check box next to the citation and then select *Clip Remove* from the dropdown box and click on the *Send to* button



Send to: E-mail

- To email your results, first click in the check box to the left of the citation, then select *E-mail* in the dropdown box and click on the *Send to* button
- On the *E-mail* page, you must select the citation display format (including Summary, Abstract and Citation) and the email format (HTML or Text)
- HTML will allow the email message to be displayed as a PubMed results page with links to Related Articles, LinkOut and other features
- For the HTML format, the recipient's email must be set for HTML view or the email will not display properly
- You can email up to 500 citations
- You can Sort the citations
- Type in the recipient's email address and click on the *Mail* button
- The email will display the sender as *Sent by Entrez* and the subject as *PubMed Search Results*

Send to: Order

- Order allows to you request selected articles through Loansome Doc
- Loansome Doc lets you to request the full-text of articles from participating medical libraries
- Each library selects its own charges and service policy



• For more information on how to register and use Loansome Doc, see the Loansome Doc Tutorial at: http://nnlm.gov/training/docline/ld/ld_using.html

Related Articles

- Related Articles accesses citations in PubMed that are most closely related to the original article
- PubMed compares words from the Title, Abstract and MeSH terms using a powerful wordweighted algorithm
- The best matches for each citation are saved and stored in a pre-calculated set
- Those citations without a *Related Articles* link have not gone through the powerful algorithm process yet

1: Chen L, Gong Q, Xiao C.



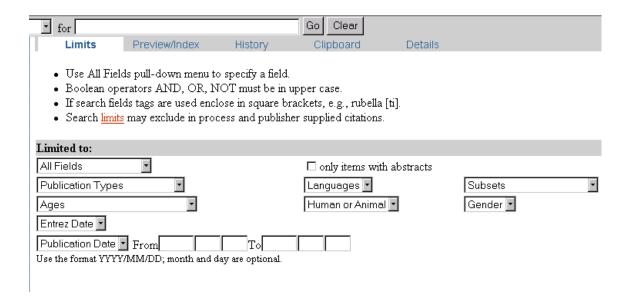
Effects of propofol, midazolam and thiopental sodium on outcome and amino acids accumulation in focal cerebral is them reperfusion in rats.

Chin Med J (Engl). 2003 Feb;116(2):292-6. PMID: 12775250 [PubMed - indexed for MEDLINE]

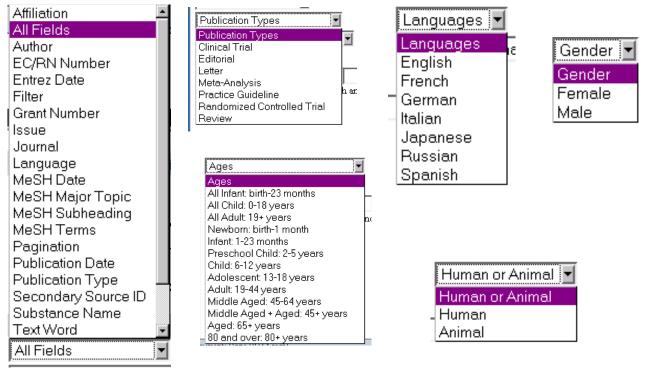
SEARCHING TOOLS

Limits

- Limits allow you to narrow a search by limiting to a *Publication Type*, *Age*, *Language*, *Human* and/or *Gender*
- Click on the *Limit* option on *Features* bar



• Limit to a specific field, such as MeSH Terms, by using the All Fields dropdown box



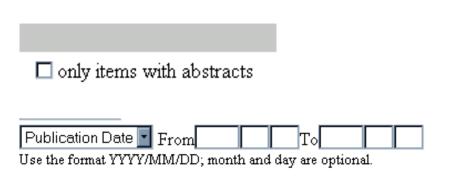
Subsets

- Subsets allows you to limit the search to specific grouping of journals
- *AIDS*: Filter for AIDSLINE
- *Bioethics*: Filter for BioethicsLine
- Cancer: Filter for CancerLit
- Complementary Medicine: Citations of journal articles related to complementary and alternative medicine
- *Core clinical journals*: 120 journals considered the main journals in clinical medicine
- Dental journals: Dental journals in MEDLINE
- History of Medicine: Subjects in history of medicine
- *MEDLINE*: All citations that have been indexed since 1966
- Nursing journals: Nursing journals in MEDLINE
- *OLDMEDLINE for Pre1966*: Filter for 1966 and older citations
- PubMed Central: Filter for journals in PubMed Central
- Space Life Sciences: Filter for SPACELINE
- *Toxicology:* Filter for TOXLINE



Publication Date, Entrez Date and Abstract Only

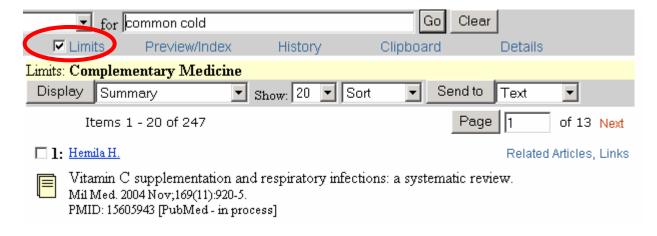
- Only items with abstracts allow you to retrieve only citations with abstracts
- Publication Date refers to the printing of the article, not the entry date into MEDLINE
- Select a range of dates by using the format indicated onscreen: YYYY/MM/DD
- Entrez Date refers to the date of Record Entry into MEDLINE





Limit Search Results

- *Limits* are retained for each search unless you click the check box next *Limits* to deselect them
- *Limits* are displayed in yellow on the top of the search result
- You can apply limits before or after entering the search terms



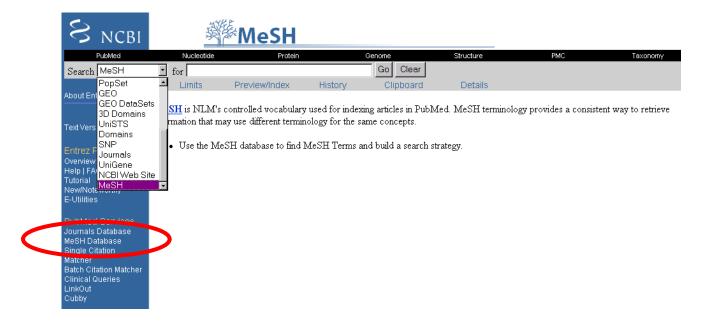
History

- *History* allows you to view your previous search strategies and results and to combine these search strategies
- Click on the *History* option on the *Features* bar
- In order for you to use this feature, your web browser must be set to accept cookies
- History search format: pound sign (#) search number Boolean operator pound sign search number (i.e. #17 AND #18)
- Boolean operators must be capitalized
- *History* retains 100 searches
- The search history will be lost after 8 hours of inactivity
- Click on the *Go* button to run your search
- The Clear History button will remove all previous searches from the list



MeSH Database

- The MeSH Database is a separate database in the Entrez system that interfaces with PubMed
- To open the MeSH Database, either click on the MeSH Database option on the left side blue menu bar or select it from the Search dropdown box.



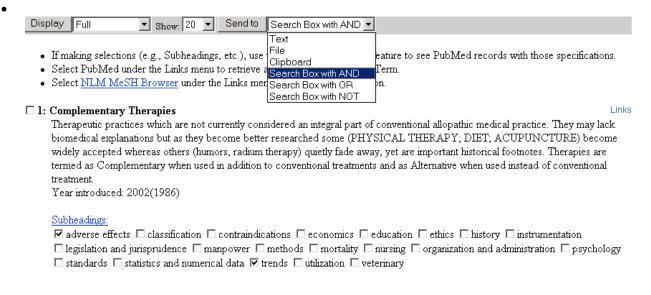
- Enter the search term(s) in the query box and click on the Go button
- The search results display MeSH terms in relevancy order
- Suggestions lists additional possibly related MeSH terms or Entry terms



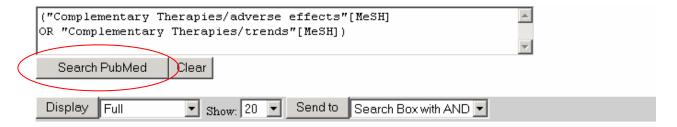
□ 1: Complementary Therapies

Therapeutic practices which are not currently considered an integral part of conventional allopathic medical practice. They may lack biomedical explanations but as they become better researched some (PHYSICAL THERAPY; DIET, ACUPUNCTURE) become widely accepted whereas others (humors, radium therapy) quietly fade away, yet are important historical footnotes. Therapies are termed as Complementary when used in addition to conventional treatments and as Alternative when used instead of conventional treatment.

- Click on the MeSH term to view the full display
- The full display screen includes *Subheadings*, *Entry terms* and the MeSH hierarchy
- Click in the boxes next to the desired *Subheadings*
- If the MeSH term should be a main topic in any results, click on the check box next to Restrict Search to Major Topic headings only



- The dropdown box next to the *Send to* button allows you to print (*Text*), download (*File*), save (*Clipboard*), or use the term to create a search strategy using the preferred Boolean term (*Search Box with AND*, *Search Box with OR*, *Search Box with NOT*)
- You can add more terms to your search strategy by typing them in the query box
- Click on the Search PubMed button to run the search in PubMed



- If making selections (e.g., Subheadings, etc.), use the <u>Send to Search Box</u> feature to see PubMed records
- Select PubMed under the Links menu to retrieve all records for the MeSH Term.
- Select NLM MeSH Browser under the Links menu for additional information.

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Pra	CTICE	CASI	rches
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1)	I have heard that people are using shark cartilage to treat cancer. Is there any evidence to prove this works?
2)	I want to find scientific articles on the treatment of insomnia with melatonin.
3)	What are the adverse effects of ephedra?
4)	I want to find scientific articles on alternative medicine treatment for fibromyalgia.
5)	I want to find articles on the use of garlic to treat high blood pressure.

BOOLEAN OPERATORS

Boolean Search Rules & Syntax

Boolean operators, AND, OR, NOT must be entered in UPPERCASE, e.g., vitamin c OR zinc.

PubMed processes all Boolean connectors in a left-to-right sequence. You can change the order in which PubMed processes a search statement by enclosing an individual concept in parentheses. The terms inside the set of parentheses will be processed as a unit and then incorporated into the overall strategy, e.g., common cold AND (vitamin c OR zinc).

If PubMed finds a phrase within a search strategy string that uses unqualified terms, it will automatically search the terms as a phrase rather than simply combining the individual words. For example, if you enter air bladder fistula in the PubMed query box, PubMed will search "air bladder" as a phrase. If you do not want this automatic phrase parsing, enter each term separated by the Boolean operator AND, e.g., air AND bladder AND fistula. Click Details to see how PubMed translated your search strategy.

Follow PubMed's search and syntax rules to enter search terms, specify the search field to be searched, and the Boolean operators in your search statement:

search term [tag] BOOLEAN OPERATOR search term [tag]

Examples of Boolean Search Statements:

dna [mh] AND crick [au] AND 1993 [dp]

OR

By combining two or more query terms (or sets) using OR, a set will be created which contains all the documents containing any of the query terms (or sets) (with duplicates eliminated), e.g., "heart attack OR myocardial infarction."

AND

By combining two or more query terms (or sets) using AND, a set will be created which contains only those documents which have each and every query term (or set), e.g., "blood pressure AND stroke."

NOT

By combining two query terms (or sets) using NOT, a set will be created that contains those documents with the first query term (or set), but which specifically excludes those documents with the second query term (or set), e.g., "health reform NOT health maintenance organizations."

PUBMED FIELD DESCRIPTIONS

Important Search Field Descriptions and Tags

Affiliation [AD] Institutional affiliation and address of the first author, and grant numbers.

All Fields [ALL] Includes all searchable PubMed fields.

Author Name [AU] The format to search for an author name is: last name followed by a space and up to the first two initials followed by a space and a suffix abbreviation, if applicable, all without periods or a comma after the last name.

Entrez Date [EDAT] Date the citation was added to the PubMed database.

Journal Title [TA] The journal title abbreviation, full journal name, or ISSN number.

Language [LA] The language in which the article was published. You can either enter the language or enter just the first three characters of most languages, e.g., chi [la] retrieves the same as chinese [la]. The most notable exception is jpn [la] for Japanese.

MeSH Major Topic [MAJR] A MeSH term that is one of the main topics discussed in the article.

MeSH Terms [MH] NLM's Medical Subject Headings controlled vocabulary of biomedical terms, which is used to describe the subject of each journal article in MEDLINE.

Personal Name as Subject [PS] Use this search field tag to limit retrieval to where the name is the subject of the article. The search rules for Author [au] apply to this field.

Publication Date [DP] The date that the article was published.

Publication Type [PT] Describes the type of material the article represents.

Subheadings [SH] Subheadings are used with MeSH terms to help describe more completely a particular aspect of a subject.

Text Words [TW] Includes all words and numbers in the title and abstract, and MeSH terms, subheadings, chemical substance names, personal name as subject, and MEDLINE Secondary Source (SI) field.

Title Words [TI] Words and numbers included in the title of a citation.

Title/Abstract Words [TIAB] Words and numbers included in the title and abstract of a citation.